

# PATENT COOPERATION TREATY

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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

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## FOR FURTHER ACTION

See paragraph 2 below

International application No.  
PCT/EP2005/050287

International filing date (day/month/year)  
24.01.2005

Priority date (day/month/year)  
18.03.2004

International Patent Classification (IPC) or both national classification and IPC  
G01F1/66, G01N29/02, G01P5/24

Applicant

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### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

IPCT/EP 2005/050287

IAP16 Rec'd PCT/PTO 18 SEP 2006

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

10/593143

1. Statement

Novelty (N)	Claims	_____	YES
	Claims	1,2,6	NO
Inventive step (IS)	Claims	_____	YES
	Claims	3-5,7-11	NO
Industrial applicability (IA)	Claims	1-11	YES
	Claims	_____	NO

2. Citations and explanations:

see supplementary page

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY  
(SUPPLEMENTARY SHEET)

International File No. PCT/EP2005/050287

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Re Point V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: US 2002/083771 A1 (KHURI-YAKUB BUTRUS T ET AL) July 4, 2002 (07-04-2002)

D4: EP-A-1 348 954 (SERVICES PETROLIERS SCHLUMBERGER) October 1, 2003 (10-01-2003)

[handwritten: D4 not relevant]

2. Novelty (Article 33(2) PCT)

The present application does not meet the requirements of Article 33(1) PCT because the of subject matter of Claims 1, 2 and 6 are not novel as defined by Article 33(2) PCT. The reasons for this are as follows:

2.1 INDEPENDENT CLAIM 1

Document D1 describes (the references in parentheses refer to this document) an ultrasonic flow sensor having at least one ultrasonic transducer for emitting and receiving ultrasonic signals (see Abstract), including:

- an array of a plurality of ultrasonic transducers which is positioned on the pipe and emits ultrasonic signals which flow through the fluid (paragraph [0027]),
- a reflective surface lying opposite the array (paragraph [0027]), and
- a receiver electronic system which detects and evaluates an ultrasonic signal reflected on the

reflective surface and received on the array (paragraph [0024]).

All features of Claim 1 have already been described in Document D1 and therefore the subject matter of Claim 1 is **not novel** (Article 33(2) PCT).

## 2.2 DEPENDENT CLAIMS 2, 6

Claims 2, 6 contain no features, which in combination with the features of Claim 1 to which they refer, meet the PCT requirements with regard to novelty because they are already known from Document D1 (see D1; Claim 2: paragraph [0027] and Claim 6: paragraph [0023]).

## 2.3 DEPENDENT CLAIMS 3 through 5, 7 through 11

The combination of features contained in the dependent claims is neither known from the present related art nor is it suggested by it (see, in particular with regard to Claims 2 through 5 and 11, the corresponding passages of Document D4 specified in the search report).